Gasoline Dispensing Facilities Vapor Balance System Testing Guidance

40 CFR Part 63, Subpart CCCCCC (6C)

Facilities with a monthly throughput of ≥ 100,000 gallons are required to conduct compliance tests on their vapor balance systems. For complete testing details, see these sections of Subpart 6C: 40 CFR Part 63.11120 – Testing and Monitoring Requirements; 40 CFR Part 63.11124 - 11126 – Notifications, Records, and Reports.

Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all storage tanks at the gasoline dispensing facility. It is calculated by adding the volume of gasoline loaded or dispensed during the current day, plus the total volume of gasoline for the previous 364 days, and then dividing that sum by 12.

Test Notification and Test Results

1. Pre-test notification – At least 60 days before the scheduled date of the test, submit written notification in the form of a letter that identifies the type of test that will be conducted and the scheduled test date.
2. Initial tests – Submit test results within 60-days after start-up along with the 6C Initial Notification and Notification of Compliance Status Form
3. Periodic tests every 3-years after initial test – Submit test results within 60-days after the test is completed along with the 6C Initial Notification and Notification of Compliance Status Form
4. Submit all notifications and test reports to: **New Mexico Air Quality Bureau, Compliance and Enforcement Section, 525 Camino de los Marquez, Suite 1, Santa Fe, NM 87505**

Storage Tanks: Tests required upon installation and every 3-years thereafter

1. Leak Rate and Cracking Pressure/Vacuum Vent Valves on Storage Tanks

   Test Method: California Air Resources Board Test Procedure TP-201.1E

   Standards:
   - Leak Rate - Total leak rate of all PV vent valves, including connections, do not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
   - Cracking Pressure - A positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water.

2. Static Pressure Performance of Storage Tanks

   Test Methods (choose one):
   - California Air Resources Board Test Procedure TP-201.3 or
   - Static Pressure Integrity Test – Underground Storage Tanks
     Bay Area Air Quality Management District Source Test Procedure ST-30

   Standard:
   - Vapor balance system meets the static pressure performance requirement of the following equation in Table 1(h) in Subpart 6C: $Pf = 2e^{-500.887/v}$
     Pf = Minimum allowable final pressure (inches of water); 2 = Initial pressure (inches of water); e = 2.718
     v = Total ullage affected by the test (gallons)

Cargo Tanks: Test and certification required annually

1. Vapor Tightness on Cargo Tanks

   Test Method:
   - Determination of vapor tightness of gasoline delivery tank using pressure-vacuum test
     EPA Method 27 - Appendix A-8 - 40 CFR Part 60
   - Follow the instructions for Method 27 described in 40 CFR 63.11092(f)(1)
     Subpart BBBBBB - 63.11092(f)(1)

   Standard:

   Maximum allowable pressure and vacuum changes for all affected cargo tanks is 3-inches of water, or less, in 5-minutes

Test Records

Storage Tanks
- Keep records of all tests for a period of 5-years.
- Such records must be made available for inspection during a site visit by Air Quality Bureau (AQB) inspectors.

Cargo Tanks
- Keep records of all annual certification tests for a period of 5-years. Such records must be kept either: 1) with the cargo tank; or, 2) most recent test record with the tank and the past 4-years of records at the owner/operator's office but available (e.g., by email or fax) to AQB inspectors during a site visit or mutually agreed upon timeframe.
- Information required to be in the test records is listed in 40 CFR Part 63.11094(b)(2)
  Subpart BBBBBB - 63.11094(b)(2)

Reporting

Annual reporting is only required if the facility experiences a malfunction event (includes process equipment, air pollution control and monitoring equipment). The report must include the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. It must also include a description of actions taken to minimize emissions and fix the malfunction. The report is due March 15th of each year and submit all notifications and test reports to: **New Mexico Air Quality Bureau, Compliance and Enforcement Section, 525 Camino de los Marquez, Suite 1, Santa Fe, NM 87505**